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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,761	09/18/2001	Gregory W. Gale	A-69853/HCH	9831

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EXAMINER

HUG, ERIC J

ART UNIT

PAPER NUMBER

1731

9

DATE MAILED: 06/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/955,761

Applicant(s)

GALE ET AL.

Examiner

Eric Hug

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-21 and 23-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7,9-21,23 and 24 is/are allowed.
- 6) ☒ Claim(s) 25-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 25-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Kelley et al (US 5,356,518). Kelley discloses a method of producing pulp molded products comprising the steps of inserting a foraminous forming mold 2 into a pulp slurry, depositing a layer of pulp onto the forming mold by means of an applied vacuum, removing the forming mold from the slurry, then transferring the forming mold with a layer of wet pulp into a female pressing die 6 having a cavity formed therein and configured to be of similar shape as the final pulp molded product. The layer of pulp is transferred to the female die and then a male pressing member 8 compresses the pulp between the walls of the female die and male pressing member. Because the pulp layer is wet, it conforms to the shape of the female die cavity and male pressing member. During pressing, vacuum and/or heat can be applied to the die and pressing member. Placing a wire screen between the pulp and the surfaces of both the female die cavity and the male pressing member can be done in shaping the pulp (column 5, lines 25-37). After the pulp has been molded, it is then dried to completion. Since two wire screens are used to mold the pulp to its desired configuration, then both sides of the pulp molded product will have screen impressions corresponding to the wire screen on the mold surfaces. The final product will have a precise thickness and determined by the amount of pulp deposited onto the forming mold and by the amount of pressure exerted on the pulp between the female die and the male pressing member. The pulp molded products have sufficient strength to be self-supporting (column 5, lines 52-62). Disclosed are funnel shaped products (tapered) which allow for nesting and de-nesting.

2. Claim 25 is rejected under 35 U.S.C. 102(b) as being anticipated by Kyle (US Re. 24,860). Kyle discloses a method of making rigid hollow pulp bodies by immersing two foraminous forming dies into a bath of pulp slurry, depositing pulp onto both surfaces of the forming dies with the aid of an applied vacuum, then joining the two dies and moving them out of the bath. Both dies have a screen 10, 15 placed over the walls upon which the pulp is deposited. The pulp product conforms to the shape of the walls of the dies. Drying is then performed while the pulp body is carried between the two forming dies. Thus, both sides of the pulp body are in contact with a forming screen at all times. The resulting product, therefore, will have impressions on both sides corresponding to the screens on the forming dies.
3. Claims 25-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Chaplin et al (US 2,326,758). Chaplin discloses an apparatus for producing pulp articles. The apparatus comprises a set of tapered cone-shaped male and female forming dies. The male forming die (A) is provided with an external forming screen 23. The female forming die (B) has a forming screen 34 lining its interior. The two screen surfaces are made up in a similar manner. A pulp product made using this apparatus will conform to the contours of the mold surfaces. Therefore, a pulp molded product will have impressions both sides corresponding to the forming screens 23 and 34. Chaplin says that the pulp molded product may be transferred to a pair of finishing dies which provide the final product with smooth surfaces. However, this is an optional step, and otherwise it would be apparent that the intermediate product will have screen impressions prior to finishing. The cone shape of the final product makes it possible for nesting and de-nesting.

4. Claim 25 is rejected under 35 U.S.C. 102(b) as being anticipated by Bodary et al (US 5,972,169). Bodary discloses a pulp slurry preform system whereby a pair of matching forming screens are moved through a pulp slurry to uniformly deposit pulp therebetween. A first main screen is placed in a tank of slurry and raised through the slurry to deposit pulp thereon. A retainer screen is then inserted into the slurry to sandwich the deposited pulp between the main screen and the retainer screen. Both screen with pulp layer in between are then raised out of the pulp slurry. The formed product is then removed for drying. Since two screens are used to mold the product, then therefore the final product will have impressions on both sides corresponding to the shape of the screens.

Allowable Subject Matter

Claims 1-7, 9-21, 23, and 24 are allowed.

The following is a statement of reasons for allowance:

Claims 1-3, 6, and 7 are allowed, because the prior art does not disclose or suggest an apparatus for producing a molded pulp product comprising a dip tank with fiber slurry, a platen, a porous mold carried by the platen, means for moving the platen and mold in a downward direction to the fiber slurry with the platen disposed upwards of the mold, a vacuum means to collect fibers on the mold while in the slurry, means for moving the mold upwardly out of the slurry and draining water from the wet molded pulp product, and means for drying the wet molded pulp product, whereby the means for moving the platen and mold immerses the mold below the surface of the fiber slurry and retains the platen so that it is not immersed.

As indicated in the previous office action, claims 4, 5 and 9-13 are allowed, because the prior art does not disclose or suggest an apparatus for producing a molded pulp product as described above and further comprising a second mating mold disposed within a drying chamber whereby the apparatus further comprises a means for mating the second mold with the first porous mold, means for transferring the molded part from the first porous mold to the second mold and for carrying the part on the second mold into the drying chamber, and means for sealing the drying chamber after the part has been transferred to the second mold and moved into the drying chamber.

Similarly, claims 14-19 are allowed, because the prior art does not disclose or suggest a method for producing a molded pulp product comprising introducing a porous mold carried by a

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platen into a fiber slurry with mold and platen moved downwardly in a manner so that the platen is upwards of the mold, the mold is immersed below the fiber slurry, and the platen is retained out of the fiber slurry, and also supplying a vacuum to the mold, withdrawing the mold from the slurry, draining water from the mold, and then drying the molded pulp product and separating it from the mold.

As indicated in the previous office action, claims 20, 21, 23, and 24 are allowed, because the prior art does not disclose or suggest a method of producing of molded pulp product as described above and comprising a second mold in a drying chamber whereby the second mold mates with the first porous mold in the drying chamber, the molded part is transferred to the second mold, the first mold is withdrawn from the drying chamber, and then the drying chamber is sealed to dry the molded part.

With respect to the amended claims and applicant's arguments, the prior art cited previously (Emery, Daniele, Hornbostel et al, Morris, and Chaplin) disclose means for making wet pulp molded products by immersing a mold downwards into a slurry and applying a vacuum to the mold. None of these references teaches or suggests the combinations of additional features described above, particularly those with respect to the movement of the platen and the mold, the position of the platen relative to the mold, and its retention out of the fiber slurry while the mold is immersed in the slurry.

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

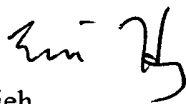
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Hug whose telephone number is 703 308-1980. The examiner can normally be reached on Monday through Friday, 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 703 308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872-9310 for regular communications and 703 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-0651.


jeh
June 19, 2003


STEVEN P. GRIFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700